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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,545	04/12/2004	Michael D. Landon	11897.16	1802

21999 7590 08/17/2007  
KIRTON AND MCCONKIE  
60 EAST SOUTH TEMPLE,  
SUITE 1800  
SALT LAKE CITY, UT 84111

EXAMINER
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BLAIR, KILE O

ART UNIT	PAPER NUMBER
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2609

MAIL DATE	DELIVERY MODE
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08/17/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/822,545	<b>Applicant(s)</b> LANDON ET AL.	
	<b>Examiner</b> Kile O. Blair	<b>Art Unit</b> 2609	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/12/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/12/04</u> . ✓ | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because it is below 50 words in length. The abstract should also be descriptive. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18 and 19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 18 and 19 are directed to the computer program product comprising a computer readable medium. The claims do not expressly or implicitly require performance of any of the steps by a machine such as a general-purpose computer. There are several tests that can be applied to determine whether claims are directed toward statutory subject matter. They include: (1) a process under 35 USC 101 requires a transformation of physical subject matter, tangible or intangible, to a different state or thing; (2) the "abstract idea" exception; and (3) the claim must recite a practical application, that is a useful, concrete, and tangible result. It is noted that claims that are broad enough to read on statutory and nonstatutory subject matter are considered nonstatutory. Claims 18 and 19 are directed to the computer readable medium having the computer executable program code thereon for producing the audio output (as per claim 18), monitoring and averaging the levels to create the ambient noise map (as per claim

19), and do not require a transformation of any physical subject matter, tangible or intangible, into a different state or thing. The claims are drawn simply to the computer software (i.e. software application), which is merely a set of instructions capable of being executed by a computer. It is noted that claims to the computer program software per se are not a process and are nonstatutory functional descriptive material. See MPEP 21 06 IV B 1(a).

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding to claims 1-3 and 5, the recitation therein is unclear, confusing and indefinite, because the claimed structure, specifically, the only structural element as claimed in claims 1-3 and 5 cannot perform the function as the temporal volume control device. The temporal ambient noise map and audio output component (as in claims 1 and 11) are separate structures and therefore it is not clear what the subject matter is that the applicant regards as his invention.

Claims 4 and 6-10 are rejected for incorporating the above errors from their respective parent claims by dependency.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-4, 6-16, 18 and 19 are rejected under 35 U.S.C. 102(a) as being anticipated by Lee et al. (US Pub. No. 2003/0123680 A1.)

Regarding claim 1, Fig. 2 of Lee et al. teaches a temporal volume control device comprising an audio output component (16, 18 and 7) for receiving information corresponding to a temporal ambient noise map having at least one ambient noise value corresponding to a time value for at least one period of time (i.e. the micro controller calculates an average of the external noise for a predetermined period of time, averages the ambient noise values, obtained for select time values and correlates an average ambient noise value to each time value and producing an audio volume level substantially corresponding to and greater than said temporal ambient noise map). See the abstract. In addition, Lee et al. also teaches in the abstract that if the external noise increases, the output signal is increased and if the external noise decreases, the output signal is decreased which shows a correspondence between the external noise and output signals, and allows a user to hear the sound of a portable computer without interruption from external noise meaning that the level of the output signal exceeds that of the external noise (paragraph [0003] ).

Regarding claim 2, Lee et al. teaches the audio output component utilizes the temporal ambient noise map to predict future ambient noise values, i.e. the micro

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controller calculates an average noise level for a current predetermined period of time and adjusts the volume level controller based on comparing the current calculated average noise with a calculated average noise for a previous predetermined period of time. See the Abstract.

Regarding claim 3, Lee et al. teaches the temporal volume control device of claim 1, wherein a difference between said audio volume level and said temporal ambient noise map is constant over time, i.e. the volume set up table [TABLE 1] which ensures that the difference between the output signal level and the external noise is substantially constant over time.

Regarding claim 4, Lee et al. teaches a manual volume control to selectively override said audio volume level, i.e. the means of manually controlling and overriding the audio volume level in paragraph [0006].

Regarding claim 6, Lee et al. teaches an ambient noise monitoring component for iteratively recording at least one ambient noise value corresponding to a time value for at least one period of time to create said temporal ambient noise map, i.e. calculating an average noise level for a current predetermined period of time by using external noise detected by a noise sensor. See the Abstract.

Regarding claims 7 and 8, Lee et al. teaches the ambient noise monitoring component operates independently or integrally of said audio output component (FIG. 2 where the external noise-monitoring component can be independent of or integral to the audio amplifier output component.)

Regarding claims 9 and 10, Lee et al. teaches the ambient noise monitoring component for averaging the at least one ambient noise value corresponding to the time

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value over at least one period of time to obtain an average ambient noise value corresponding to the time value, and the average ambient noise values corresponding to the time values over the period of time, i.e. the average value of noise corresponding to a time value and a period of time cited in the abstract of Lee et al..

Regarding claim 11, Lee et al. teaches a method for controlling audio output volume by monitoring levels of ambient noise over at least one period of time (lines 3 and 4 of the Abstract), averaging the levels of ambient noise to create a temporal ambient noise map (lines 3-6 of the Abstract), communicating the temporal ambient noise map to an audio output device which capable of automatically adjusting an audio output volume level to substantially correspond to the temporal ambient noise map (the connection between 11 and 14 of Fig. 2), and producing, via the audio output device (16, 18, 7), audio information according to the audio output volume level (see the Abstract and paragraph [0003]).

Regarding claim 12, Lee et al. teaches correlating at least one ambient noise value with at least one time value over the at least one period of time, i.e. the system of monitoring external noise in the abstract where noise values are correlated to time values over a period of time.

Regarding claim 13, Lee et al. teaches determining an average ambient noise value corresponding to said at least one time value over said at least one period of time, i.e. the system of determining an average ambient noise value corresponding to a time value for a predetermined period of time of Lee et al.'s Abstract.

Regarding claim 14, Lee et al. teaches maintaining the audio output volume level at a level greater than levels corresponding to said temporal ambient noise map

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(paragraph [0003] where the audio output will overcome and be greater than the external noise).

Regarding claim 15, Lee et al. teaches the temporal volume control device of claim 1, wherein a difference between said audio volume level and said temporal ambient noise map is constant over time, i.e. the volume set up table [TABLE 1] which ensures that the difference between the output signal level and the external noise is substantially constant over time.

Regarding claim 16, Lee et al. teaches a manual volume control to selectively override said audio volume level, i.e. the means of manually controlling and overriding the audio volume level in paragraph [0006].

Regarding claim 18, Lee et al. teaches a computer for executing the computer program code to produce the audio output (16, 18, 7) of the audio information according to the audio output volume level which is substantially correspond to the temporal ambient noise map (lines 3-6 of the Abstract and paragraph [0003]).

Regarding claim 19, Lee et al. teaches monitoring level of ambient noise over the at least one period of time, i.e. the system of monitoring external noise in the abstract where noise values are correlated to time values over a period of time, and averaging the ambient noise value to create the a temporal ambient noise map (i.e. the micro controller calculates an average of the external noise for a predetermined period of time, averages the ambient noise values, obtained for select time values and correlates an average ambient noise value to each time value and producing an audio volume level substantially corresponding to and greater than said temporal ambient noise map). See the Abstract.



***Claim Rejections - 35 USC § 103***

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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8. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US Pub. No. 2003/0123680 A1) in view of Albrecht et al. (US Pat. No. 5,755,671).

It is noted that the teaching of Lee et al. does not specifically disclose the limitation of the period of time is twenty-four hours as required. However, Albrecht et al. teaches a twenty-four hour period for taking data samples (col. 12, line 40). Hence, it would have been obvious to one of ordinary skill in the art to modify the device and method of Lee et al. with the feature of the period of time is twenty-four hours as taught by Albrecht et al., so as to add a limitation of a twenty-four hour sampling time to the temporal ambient noise map of.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sapashe (US Pub. No. 2005/0059369 A1) discusses a volume control technique that measures the background audio environment. The volume control makes an intelligent decision on changing the volume. The volume control also corresponds to the level of the background noise.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kile O. Blair whose telephone number is (571) 270-3544. The examiner can normally be reached on Monday-Friday EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe H. Cheng can be reached on (571) 272-4433. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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JOE H. CHENG  
SUPERVISORY PATENT EXAMINER